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ABSTRACT

The relationship between cumulative grade point average (GPA) and the time needed to secure employment in the field of study was studied with 108 business college graduates during 1982-1984. Information was obtained through a computer listing of graduates from Robert Morris College, a private Illinois institution that provides intensive career education and general education. The listing consisted of all graduates from a 10-month program of study for years 1982, 1983, and 1984. The data were assessed using the SuperCalc spreadsheet program. The amount of time needed to obtain a job did not significantly decrease as GPA increased. Several possible reasons for the results are posed. It is suggested that interviewers may look for personality, ability, dependability, and reliability; high grades do not necessarily ensure the above list of traits. Another possible explanation concerns economic conditions. While 1984 was a good year for employment openings, 1982 was a tight job market and could have affected the ability to secure positions. (SW)

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IS THERE A RELATIONSHIP BETWEEN CUMULATIVE GRADE POINT AVERAGE AND JOB PLACEMENT TIMING?

By

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IS THERE A RELATIONSHIP BETWEEN CUMULATIVE GRADE POINT AVERAGE AND JOB PLACEMENT TIMING?

ABSTRACT

Students who are extremely successful in college are often considered to be able to secure employment ease and speed, whereas less successful students are almost expected to have a more difficult time in securing employment.

This study examined the relationship between academic success (cumulative grade point average) and time needed to secure employment in the field of study of 108 business college graduates over the years 1982 - 1984. Although a negative correlation existed, it was extremely weak (approximately -.4) and not considered to be statistically significant.

INTRODUCTION

The purpose of a postsecondary education is often associated with personal fulfillment, the pursuit of a particular area of interest, and more practically, to secure employment. Students are often pressured by their own internal motivation and told by their parents to perform well in school and to absorb as much as possible in order to succeed. Students compete to become the best in their area of study by getting the highest grades, and

hopefully, to become the most attractive to potential employers. In College to Career (1977), McGraw-Hill suggests that employers respect top grades and students should work for them. But, does a person who performs well as a student have an advantage by securing employment easier and faster than a person with lower performance in academia?

STATEMENT OF RESEARCH PROBLEM

Employers often request grade averages when recruiting for openings. It is considered to be an effective way of screening in order to hire good employees--higher grades imply better workers. However, successful students do not always find it to be easy to secure employment and sometimes continue interviewing while their less successful academic peers obtain employment.

The present study examined, through a non-experimental correlation, how the amount of time business college graduates needed to secure a full-time position in their area of study may be related to their cumulative grade point average earned during a 10-month program of study.

REVIEW OF LITERATURE

Although studies related to the specific relationship between cumulative grade point average and the timing of a job placement are few, several studies have been conducted

on related subjects, such as the relationship between general achievements and grades.

Lewis and Nelson (1983) conducted a graduate survey regarding the relationship between college grades and alumni vocational achievement, acceptance of responsibility in social groups, and further intellectual development which revealed the only significant finding was an inverse relationship with involvement in community activities among males.

Cohen (1984) showed little correlation between college grades and various criteria of adult achievement on success. The predictive value of grades was questioned in Cohen's study.

A more narrowed study conducted by Kuh (1974) focused on teacher placement and discussed employer attitudes toward the importance of prospective employees' grades. The results indicated grades were of less importance than professional and/or training references.

A study conducted by Nelson (1975) is also important to consider in this study. An inquiry into the use and value of college academic records as a primary basis for predicting later occupational success implies that grade point average is a poor predictor of later vocational achievement. The study states that at the very least, the evidence suggests that no single measure of college achievement should be used alone as a basis for selection decisions particularly because of a wide variation in the meaning of grades from school to school.

According to Camden (1984), grade point average is only one of the several variables reviewed by company recruiters. He also states that "who you know" is important and that professor and employee references can open doors that grades alone cannot open.

Conversely, Klitgaard (1985) states ". . . I am willing to bet, based on current evidence, that for young men and women test scores and grades forecast later success in business, law, medicine, and academia better than existing measures of personality, character, leadership, or diligence."

Some writers believe the hypothesis of this research study to be true and support it as follows:

Ehrlich (1976) states that:

> "Employers of college graduates are also interested in students' records, and grades provide a good initial screening device to use before making job offers. . . While recruiters are interested in many things about you . . . they are primarily interested in how well you have done in your courses.
>
> Companies that have their pick of college graduates set their sight on the top 10 percent of the class. Initially they will not even interview anyone outside this select group."

RESEARCH HYPOTHESIS

It was hypothesized that as the cumulative grade point average (on a 4.0 scale) of business college graduates increases, the time necessary to secure a full-time position in their area of study decreases. The idea that one who performs as an exceptional student would be more desirable as a candidate for employment and offered positions more quickly is being studied.

It was, therefore, hypothesized that a negative correlation (Pearson Correlation Coefficient) existed between cumulative grade point average and placement time. A negative correlation with an r value of less than -5 would be considered significant.

RESEARCH DESIGN/METHODOLOGY

A non-experimental, quantitative study was used to analyze the dependent variable, time to secure a job, and the independent variable, cumulative grade point average, through a computer listing of graduates from Robert Morris College, Chicago. The listing was requested and obtained from Robert Morris College's (RMC) Career Services Department.

Subjects. Robert Morris College is an independent institution of higher education dedicated to providing intensive career education and general educational opportunities satisfying both student and employer needs. Students may enroll in several different secretarial or

business programs, such as word processing, legal secretarial, accounting, and sales and marketing.

RMC admits students of any race, color, sex, national origin, or with any handicap and is accredited by the North Central Association of Colleges and Schools (NCA) and the Association of Independent Colleges and Schools (AICS).

Instruments. The listing was comprised of all graduates from a 10-month program of study for years 1982, 1983, and 1984. A systematic random sampling was used by choosing every 10th GPA and its corresponding placement time.

A total of 108 pairs of data was used--47 from 1982, 30 from 1983, and 31 from 1984 (See Tables 1-3.). Placement time is calculated by weeks corresponding to the student's graduation date. For example, -1 weeks indicates the student accepted a job offer one week prior to his/her graduation and +4 would indicate the student accepted a job offer four weeks after his/her graduation.

A correlation of the sampled GPA and placement time was calculated by the following procedure to determine if the hypothesized negative correlation existed.

Procedure. The data from Tables 1, 2, and 3 were keyed into a personal computer using the SuperCalc spreadsheet program (See Table 4.).

The program was written so that the following would be calculated:

- sum of all job placement timings
- sum of all cumulative grade point averages
- square of each job placement timing
- sum of all squares of job placement timings
- square of each cumulative grade point average
- sum of all squares of cumulative grade point averages
- product of each job placement timing and its corresponding cumulative grade point average
- sum of all products of job placement timing and its corresponding cumulative grade point average

RESULTS

Using the Pearson Correlation Coefficient of

$$r = \frac{n\Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{[n\Sigma X^2 - (\Sigma X)^2][n\Sigma Y^2 - (\Sigma Y)^2]}}$$

the data was plotted into the formula. X was designated as the job placement timing (in weeks) needed to secure a full-time position and Y was designated as the cumulative GPA attained. The following equation was obtained:

$$r = \frac{(108)(211.77) - (101)(338.93)}{\sqrt{[(108)(2575) - (10201)][(108)(1094.145) - (114873.54)]}}$$

After extending the computations as follows,

$$r = \frac{22871.16 - 34231.93}{\sqrt{(267899)(3294.12)}}$$

and completing the calculations as indicated below,

$$r = \frac{-11360.77}{\sqrt{882491453.88}}$$

an r value answer of

r = -.3824305 or -.4

was attained.

The data from Tables 1, 2, and 3 was also generated to a scatterplot to visually illustrate the relationship between cumulative grade point average and job placement timing (See Table 5.). The more closely a scatterplot reflects a straight line, the stronger the relationship between the variables; no relationship is apparent on the scatterplot.

DISCUSSION, IMPLICATIONS, CONCLUSIONS

The hypothesized correlation was indeed obtained through this particular study. Although -.4 indicates a negative correlation, it is extremely weak and cannot be considered statistically significant. The hypothesis has indicated that an r value of less than -5 would be considered significant.

There are several reasons why the data may not have exhibited the hypothesized relationship. Many employers consider grade point average, but are more interested in the candidate's growth potential as an employee.

Interviewers look for personality, ability, dependability, and reliability; high grades do not necessarily ensure the above list of traits. Many skills can be taught on the job, but personality and common sense cannot.

During the interview process, a candidate with the above traits and a gregarious personality may be selected over a candidate with high academic success but an attitude of overconfidence (construct validity).

Another reason why the relationship may not have been demonstrated in this study is because of the more successful student's own self-image. That student may feel there will be such a numerous supply of job offers that he/she decides to delay the acceptance of several employment offers while waiting for that always-better offer; they may be more choosy, whereas the lower performer may accept a position earlier because they appreciate an offer--any offer--and jump at the employment opportunity (maturation).

Another factor may be the time period studied. The years researched, 1982-1984, vary in terms of employment opportunities. Economic conditions dictate the job market and the availability of open jobs. While 1984 was a good year in terms of employment openings, 1982 was a tight job market and could have affected the ability to secure positions (history - internal validity).

Therefore, in this study, as a business college graduate's grade point average increases, the amount of time needed to secure a job does not necessarily decrease. The research does not intend to imply or suggest, however, that grades are not important; one should always strive to do one's very best in academia. A foundation of knowledge must exist in order to by employed at all. The author believes that the results of this study can probably be generalized to college students as a whole.

1982

Timing of Job Placement*	Cumulative GPA	Timing of Job Placement*	Cumulative GPA
- 5	4.0	+ 4	3.14
- 4	4.0	+10	3.13
- 5	3.94	- 2	3.06
0	3.84	0	3.06
- 3	3.81	+17	3.0
- 4	3.78	+ 1	3.0
+ 2	3.75	+ 8	2.94
+ 2	3.69	0	2.88
+13	3.63	- 3	2.86
- 2	3.56	+ 4	2.81
+ 5	3.56	+ 1	2.81
+ 4	3.5	+ 5	2.75
+ 1	3.49	+ 8	2.75
+ 6	3.44	+ 1	2.69
0	3.4	+ 9	2.63
+ 4	3.38	+ 8	2.56
0	3.32	+ 2	2.53
+ 5	3.31	- 1	2.5
0	3.29	+ 3	2.44
+ 2	3.25	+ 3	2.34
0	3.24	+ 8	2.25
+15	3.19	+ 4	2.17
- 1	3.19	+ 5	2.06
		+ 5	1.81

* Related to week of graduation from program.

1983

Timing of Job Placement*	Cumulative GPA	Timing of Job Placement*	Cumulative GPA
- 6	4.0	- 4	3.06
- 6	3.94	+13	3.05
+ 5	3.88	- 4	3.0
- 2	3.78	+ 1	3.0
0	3.75	+ 5	2.94
0	3.67	- 1	2.88
0	3.57	+ 5	2.81
0	3.52	+ 6	2.72
+ 2	3.5	- 1	2.62
+ 4	3.44	- 2	2.53
- 8	3.31	+ 4	2.44
0	3.28	0	2.37
- 1	3.25	- 2	2.25
+ 2	3.19	+ 4	2.13
+ 2	3.13	- 1	1.93

* Related to week of graduation from program.

1984

Timing of Job Placement*	Cumulative GPA	Timing of Job Placement*	Cumulative GPA
- 6	4.0	- 4	3.31
- 5	3.94	0	3.28
- 7	3.88	+ 1	3.22
- 4	3.83	+ 1	3.16
- 4	3.78	- 2	3.11
- 2	3.75	- 1	3.05
- 5	3.67	- 2	3.0
- 3	3.64	- 2	2.94
- 1	3.56	0	2.89
- 6	3.5	+ 2	2.82
- 6	3.5	+11	2.75
+ 2	3.5	+ 2	2.66
- 5	3.44	- 4	2.5
- 1	3.4	- 1	2.5
- 6	3.38	+ 6	2.31
		+ 3	1.99

* Related to week of graduation from program.

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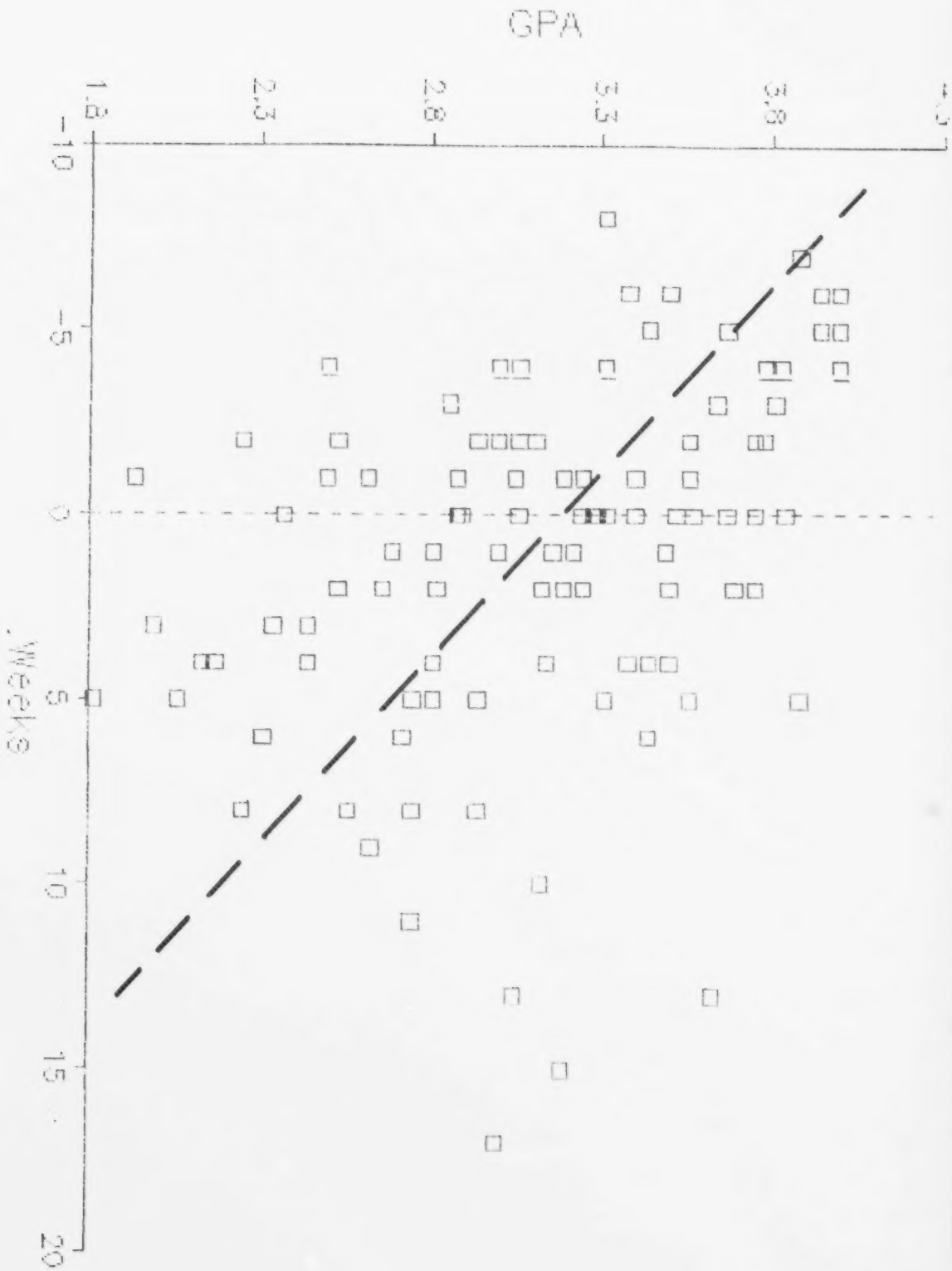
X	Y	X^2	Y^2	XY
Weeks	GPA			
5	4	25	16	-20
4	4	16	16	-16
5	.94	25	15.5236	-19.7
5	.84	25	14.7456	0
3	.81	9	14.5161	-11.4
4	.78	16	14.2884	-15.12
2	.75	4	14.0625	7.5
3	.69	9	13.6161	7.38
13	.63	169	13.1769	47.19
2	.56	4	12.6736	-7.12
5	.56	25	12.6736	17.8
4	.5	16	12.25	14
1	.49	1	12.1801	3.49
6	.44	36	11.8336	20.64
0	.4	0	11.56	0
4	.38	16	11.4244	13.52
5	.31	25	11.0224	0
5	.25	25	10.9561	16.55
0	.25	0	10.8241	0
2	.25	4	10.5625	6.5
0	.24	0	10.4976	0
15	.19	225	10.1761	47.85
1	.19	1	10.1761	-3.19
4	.14	16	9.8596	12.56
10	.13	100	9.7969	31.36
2	.06	4	9.3636	-6.12
17	.06	289	9.3636	0
1	.06	1	9	51
8	.94	64	8.6436	23.52
0	.88	0	8.2944	0
3	.86	9	8.1796	-8.58
4	.81	16	7.8961	11.34
1	.81	1	7.8961	12.81
5	.75	25	7.5625	13.75
8	.75	64	7.5625	0
1	.69	1	7.2361	2.76
9	.63	81	6.9169	23.52
8	.56	64	6.5536	20.48
2	.5	4	6.4009	5.06
1	.5	1	6.25	2.5
3	.44	9	5.9536	7.38
3	.44	9	5.9536	7.02
8	.19	64	5.0625	18
4	.19	16	4.7089	8.68
2	.06	4	4.2436	10.38
1	.81	1	3.2761	9.05
4	.44	16	1.9536	-2.64
6	.94	36	15.5236	-23.64
5	.88	25	15.0544	19
4	.88	16	14.2884	-7.04
0	.78	0	14.0625	0
0	.75	0	13.4689	0
0	.67	0	12.7449	0
4	.64	16	12.3904	0
0	.56	0	12.25	0
4	.44	16	11.8336	13.76
31	.31	64	10.9561	-26.48
0	.28	0	10.7584	0
1	.25	1	10.5625	-3.25
4	.19	4	10.1761	6.5
4	.19	4	9.7969	6.08
4	.06	16	9.3636	-12.24
3	.06	169	9.3025	39.6
4	.06	16	9	-12
1	.06	1	9	3
5	.94	25	8.6436	14.7
1	.88	1	8.2944	-2.88
5	.81	25	7.8961	14.58
6	.78	36	7.3984	16.38
1	.75	1	6.8644	-11.5
4	.69	16	6.4009	9.76
4	.63	16	6.9536	0
0	.63	0	6.6169	0
4	.56	16	6.0625	-4
4	.5	16	5.5369	8.5
1	.5	1	3.7249	-1.95
4	.44	16	1.9536	-2.64
5	.94	25	15.5236	-19.7
4	.88	16	14.6689	-15.32
4	.78	16	14.2884	-15.12
0	.75	0	14.0625	-7.5
5	.67	25	13.4689	-18.35
9	.64	9	13.2496	-10.92
1	.56	1	12.6736	-3.56

Table 4, cont'd

-5	3.44	25	11.8336	-17.2	
-1	3.4	1	11.56	-3.4	
-6	3.38	36	11.4244	-20.28	
-4	3.31	16	10.9561	-13.24	
0	3.28	0	10.7584	0	
1	3.22	1	10.3684	3.22	
1	3.16	1	9.9856	3.16	
2	3.11	4	9.6721	6.22	
-1	3.05	1	9.3025	-3.05	
-2	3	4	9	-6	
2	2.94	4	8.6436	5.88	
0	2.89	0	8.3521	0	
2	2.82	4	7.9524	5.64	
11	2.75	121	7.5625	30.25	
2	2.66	4	7.0756	5.32	
-4	2.5	16	6.25	-10	
-1	2.5	1	6.25	-2.5	
6	2.31	36	5.3361	13.86	
3	1.99	9	3.9601	5.97	
101	338.93	2575	1094.145	211.77	SUMS

Table 5



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